

REMARKS

Claims 14-16, 20 and 21 are pending in this application. By this Amendment, claims 14, 20 and 21 are amended to further describe the subject matter recited therein. Support for the amendments to claims 14, 20 and 21 can be found, at least, at paragraphs [0029]-[0048] and [0050] of the specification. Claims 14, 20 and 21 are further amended to overcome the claim objection. Paragraph [0035] is amended to overcome the objection to the drawings. No new matter is added by this Amendment.

I. Information Disclosure Statement

The Patent Office alleges that the supplemental information disclosure statement (IDS) filed on October 25, 2007 does not comply with 37 C.F.R. §1.98(a)(1).

Although Applicants disagree because the supplemental IDS merely provided additional information for a previously disclosed reference (which information should be considered), Applicants submit herewith a blank PTO 1449 form listing the single reference disclosed in the supplemental IDS. Applicants respectfully request the Patent Office to initial the PTO 1449 form, confirming consideration of the information disclosed in the supplemental IDS.

II. Drawing Objection

The Patent Office objects to Figures 5 and 6 of the specification because reference character "t" was allegedly not described in the specification.

Applicants have amended paragraph [0035] of the specification to include a description of reference character "t" in Figures 5 and 6 in accordance with 37 C.F.R. §1.121(b).

Withdrawal of the objection is respectfully requested.

III. Claim Objection

The Patent Office objects to claims 14, 20 and 21 because an alleged informality in claims 14, 20 and 21 with respect to the volume rate.

In accordance with the Patent Office's suggestion, Applicants have amended claims 14, 20 and 21 to recite that the first layer of the porous material has a plate thickness of 0.5 mm and a volume rate of 60 to 70%.

Withdrawal of the objection is requested.

IV. Rejection Under 35 U.S.C. §103(a)

The Patent Office rejected claims 14-16, 20 and 21 under 35 U.S.C. §103(a) as allegedly being unpatentable over JP 08-086324 ("JP '324") in view of JP 07-232261 ("JP '261"). Applicants respectfully traverse the rejection.

The Patent Office admits and the Applicants agree, that JP '324 does not describe a single-layered porous material with (1) a volume rate that is from 30 to 60% when a plate thickness of a portion of the porous material which contacts the secondary material in a direction spaced from the secondary material is not less than 1 mm and less than 2 mm, and (2) a volume rate that is from 20 to 60% when a plate thickness of a portion of the porous material which contacts the secondary material in a direction spaced from the secondary material is not less than 2 mm. Furthermore, the Patent Office admits and the Applicants agree, that JP '324 does not describe the double-layered porous material having a first layer proximate to the secondary material and a second layer proximate to the main material, the first layer of the porous material having a plate thickness of 0.5 mm and a volume rate of 60 to 70%, and the second layer of the porous material having a plate thickness of 0.5 mm and a volume rate of 20%. The Patent Office introduces JP '261 as allegedly describing this feature.

The Patent Office alleges that JP '261 describes a porous material having a plate thickness of 1 mm and volume rate of 60%. See Office Action, page 5 (citing JP '261,

Example 15 in paragraph [0083]). Applicants respectfully disagree with Patent Office's characterization of JP '261 and submit that JP '261 does not remedy the deficiencies of JP '324. Applicants thus provide the following explanation to clarify the Patent Office's misunderstanding of JP '261.

Applicants have amended claims 14, 20 and 21 to recite that wherein in a case in which the porous material has a single layer structure, the porous material is composed of a single material which has a volume rate that is from 30 to 60% when a plate thickness of a portion of the porous material which contacts the secondary material in a direction spaced from the secondary material is not less than 1 mm and less than 2 mm. In other words, claims 14, 20 and 21 recite that the first embodiment (single-layer structure) for the porous material is comprised of a single material.

In contrast, JP '261 describes that the porous material is a composition layer having a double-layer structure, wherein each layer of the double-layer structure is comprised of two materials. JP '261 further describes that the first layer of the double-layer structure has a volume rate of 60% (volume rate of first layer = volume rate of a stainless steel powder + volume rate of an alumina fiber = 50% + 10%). See JP '261, paragraph [0083]. Furthermore, JP '261 describes that the second layer of the double-layer structure also has volume rate of 60% (volume rate of second layer = volume rate of stainless steel powder + volume rate of alumina fiber = 25% + 35%). See JP '261, paragraph [0083]. In other words, JP '261 clearly describes a double-layered porous material where each layer is comprised of two materials (i.e., stainless steel and alumina), and thus is distinguished from the single-layered porous material comprised of a single material, as recited in the first embodiments of the present claims.

Furthermore, claims 14, 20 and 21 recite in a case in which the porous material has a double-layer structure having a first layer proximate to the secondary material and a second

layer proximate to the main material, the first layer of the porous material has a plate thickness of 0.5 mm and a volume rate of 60 to 70%, and the second layer of the porous material has a plate thickness of 0.5 mm and a volume rate of 20%. In other words, claims 14, 20 and 21 recite that the second embodiment (double-layer structure) for the porous material has a total plate thickness of 1.0 mm, wherein the first layer has a thickness 0.5 mm and a volume rate of 60 to 70%, and the second layer has a plate thickness of 0.5 mm and a volume rate of 20%.

As described above, JP '261 describes a porous material with a double layer structure. However, JP '261 does not describe a double-layered porous material with a total plate thickness of 1.0 mm. In contrast, JP '261 describes that the thickness of the magnetic metal powder layer, not the porous material layer, is 1.0 mm. Such a conclusion is supported by paragraph [0083] of JP '261, which describes that "[s]tainless steel (SUS430) powder is pressurized by the pressure of about 686 MPa(s), and it is a diameter. 200 mm, thickness 1mm, consistency of 95% of magnetic metal powder layer was produced." Applicants submit that the "thickness 1 mm" description is one of the characteristics (including the 200 mm diameter and the 95% consistency) of the magnetic metal powder layer, and does not describe the thickness of the double-layered porous material, which is not mentioned in JP '261. As such, JP '261 merely describes the thickness of the magnetic metal powder to be 1 mm, and does not describe the thickness of a double-layered porous material layer to be 1 mm.

For the reasons described above, JP '324, alone or in combination with JP '261, would not have a provided one of ordinary skill in the art with any reason or rationale to have developed the composite material of claims 14, 20 and 21 with a reasonable expectation of success.

V. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 14-16, 20 and 21 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



William P. Berridge
Registration No. 30,024

Jeremy D. Tillman
Registration No. 62,639

WPB:JDT/hs

Attachment:
PTO Form 1449

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OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

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